Assembly and Uses of a Housing Data-Sharing Network in Minneapolis

by Jacob Wascalus and Michael Grover

Abstract: Like many cities across the country caught up in the previous decade’s housing boom and bust, Minneapolis is experiencing mortgage-default problems on a scale not seen since the Great Depression. Foreclosed properties and vacant homes are dotted across the city, with concentrations in some particularly hard-hit lower income areas. In dealing with the slew of direct and indirect consequences, Minneapolis has benefited from a history of openness and information-sharing among local nonprofits, neighborhood organizations, City and County agencies, and academic institutions. This broad coalition of partners has developed a strong, data-driven network to help identify vacant properties for remediation and guide neighborhood-stabilization efforts. Fortunately, other cities can replicate this model and build a coalition of data providers to meet any number of needs. This article provides a snapshot of the housing situation in Minneapolis in recent years and highlights how a group of community, nonprofit, and government partners created and used a data-sharing network to develop stabilization strategies that focus on individual properties within neighborhoods.

Since 2005, Minneapolis has experienced a wave of foreclosures that has touched every neighborhood in the city. The citywide foreclosure rate crested in 2008 at 3.1% of residential parcels, and although this number pales in comparison to cities like Las Vegas and Phoenix, the percentage of foreclosures reached nearly 11% in some Minneapolis neighborhoods. In fact, North Minneapolis, where approximately 17% of the city’s residential parcels are located, had the dubious distinction of containing nearly 4 in 10 of Minneapolis’s foreclosures in 2010.

Vacancies provide an even starker indicator of an area’s economic and social health. North Minneapolis leads the city in both categories. Foreclosed and vacant properties are a stark indicator of an area’s economic and social health. North Minneapolis leads the city in both categories.

Registration (VBR) program,¹ which tracks vacant buildings and assesses fees to property owners, recognizes

¹ The Vacant Building Registration program is Minneapolis’s primary tool for tracking, monitoring, and managing nuisance vacant properties, and all owners of vacant properties must register and pay an annual fee. For more information about the program, including conditions under which properties may be required to be registered as vacant, see www.minneapolismn.gov/inspections/inspections_ch249list.

nearly 500 North Minneapolis family residences as being vacant. However, other data discussed later in this article suggest a number closer to 1,600. The recently elevated level of vacant properties in North Minneapolis on the heels of a housing-market surge stoked by speculation, mortgage fraud, subprime lending, and rental property investment has contributed to an increase in property crimes.
The 4th Precinct Community and Resource Exchange (CARE) Task Force responded. Active since 1998, the CARE Task Force is an assembly of City, County, and community representatives, including many longtime North Minneapolis neighborhood residents, that promotes safety and livability in Minneapolis’s 4th Precinct through crime prevention and alerts. In late 2010, the CARE Task Force convened a group of stakeholders to initiate the Vacant House Project (VHP). The task force began by strategizing with a representative of the Minneapolis Police Department on solutions to the growth in property crime, including copper theft. According to the police department, thieves were entering primarily vacant homes and stripping them of copper, causing substantial damage that ranged from flooded basements to torn-up floorboards to smashed walls. Conversations with real estate investors, developers, and general contractors indicated that, in many cases, the damage to these residences was so severe that the cost of buying and repairing these homes was too steep to justify financially. In addition, the demand for owner-occupied housing on the north side of Minneapolis was weak. As a result, the task force advocated a comprehensive approach that would include a portfolio of options, such as land banking, strategic demolition, and well-managed rentals. The first priority, however, was to identify which houses were vacant. For this, they needed to enlist additional partners to aid in the VHP.

In January 2011, the group reached out to CURA to help lead the effort to identify vacant houses for protection from vandals and thieves and for assessment of appropriate disposition options (e.g., rehabilitation, demolition, land bank, rental). CURA was well positioned as a trusted broker of local information to lead a data-collection effort to create a database of indicators of housing vacancy and distress.

Other partners affected by the housing conditions in North Minneapolis were invited to join this effort, with the goal of establishing fact-based, data-driven strategies to address the ailing housing market in North Minneapolis. The roster of participating parties grew to include the following:

- various offices and departments within the City of Minneapolis, which provided water-meter data, properties slated for demolition, the official list of vacant buildings, and guidance on remediation strategies
- Hennepin County, which provided parcel data, foreclosure listings, real estate owned (REO) property listings, tax delinquency and forfeitures, and sheriff sale dates
- the Minneapolis Police Department, 4th Precinct, which provided a listing of properties that encountered copper theft
- the Federal Reserve Bank of Minneapolis, Community Development Department, which provided technical assistance and statistics on mortgage originations and mortgage foreclosure and delinquency rates
- the Pohlad Family Foundation, which provided funding and project guidance
- the Folwell Neighborhood Association and Webber Camden Neighborhood Association, whose members provided on-the-ground visual reports of homes that appeared to be vacant (referred to as “windshield surveys”) and local Multiple Listing Service data
- the Twin Cities Community Land Bank, which provided information on properties available through the Neighborhood Stabilization Program (NSP) First Look Program
- CURA, which acted as technical lead and central partner in data collection and analysis

Together, the partners created a list of data elements that could be used to help identify vacant and distressed properties (see sidebar at right).

Developing Data Strategies
Based on its knowledge of neighborhood-level data and extensive experience assisting neighborhood organizations and local governments with the use of these data to identify issues and problems, CURA gathered a roster of data sets that was not only useful in identifying vacant and distressed properties, but also helpful in developing strategies for remediation. In fact, CURA already possessed several data sets needed to create this database, including parcel data, foreclosures, sheriff sales, and the City’s official VBR list. Obtaining most of the remaining information required little more than contacting those officials who had access to the pertinent data, many of whom had worked with CURA and members of the VHP coalition in the past. There were few administrative or legal barriers preventing the acquisition of data in a timely manner, and CURA was able to assemble the bulk of the indicator data in spreadsheets and mapping files in just a few weeks, with no cost other than staff time. At that point, CURA was able to provide...
statistical information, tables, and maps to the City, County, and community decision makers in the VHP.4

Ultimately, when all of these data elements were mapped using geographic information systems (GIS) software—an important tool in determining the accuracy of the data and extent of the vacancy problem—a composite picture of Minneapolis’s north side emerged that revealed clear areas of concern (Figure 1). The splash of data points that dot the parcel map in Figure 1 represents a snapshot of the housing situation in North Minneapolis in mid-2011. Visibly, this much is clear: some areas appear more stable while others appear distressed. At a finer scale, however, the picture is sometimes still fuzzy. Although a single indicator does not necessarily mean that a house is vacant, the likelihood of vacancy increases as multiple indicators begin to stack up on a single parcel (see Figures 2 and 3). In short, though the status of individual properties can remain uncertain, the coalition now has a much-improved picture of the scope of its vacant-property problem and the areas most severely affected.

Developing Policy Strategies

By the spring of 2011, the VHP coalition had begun to put its new database to use as a neighborhood-stabilization tool, using the data to sketch out a range of options to address crime prevention and reinhabitation (summarized in Table 1).

The new data also raised significant questions about the accuracy of the data that policy makers use. Because the VBR list appears to account for only about a quarter of the properties believed to be vacant (as mentioned earlier), the City could be losing millions of dollars in vacant-property fees as well as failing to adequately address vacant-property issues.5 In addition, the vacancy maps reveal that the number of parcels with little or no reported water usage far exceeds other indicators of vacancy, raising the previously unrecognized prospect that thousands of the city’s residential water meters may be broken or malfunctioning.

Next Steps in the VHP

The VHP coalition is continuing to work with CURA to enhance the database, even as it is beginning to apply it to neighborhood-stabilization issues. One potential avenue for enhancing the database is using the methodology of the Foreclosure Risk and Housing Market Indexes developed by the Local Initiatives Support Corporation (LISC), a new tool that measures the strength of an area’s housing market. The HMI can help local leaders better plan and target sustainable housing interventions as part of their broader reinvestment effort. The HMI borrows from an index created by the Local Initiatives Support Corporation. The most significant difference is the HMI’s geographic specificity—neighborhoods are measured by block, not census tract or zip code. The HMI offers a block-by-block view that provides a more precise understanding of neighborhoods. When applied to a neighborhood, it clearly shows investment and disinvestment, as rates of owner-occupancy, housing condition, vacancy, and value retention are combined and compared.

In North Minneapolis, the area examined in this report, the block-by-block view finds a much more diverse housing market, with the blocks in some neighborhoods falling almost entirely on one side of the housing strength spectrum and the blocks in other neighborhoods running the entire gamut of housing strength. Understanding this diversity can lead to improved intervention strategies and a better targeting of limited resources for long-term and, in some cases, scalable improvements. The report argues that local leaders, city agencies, and neighborhoods should use the HMI when planning, especially in neighborhoods like those in North Minneapolis that have experienced disinvestment and destabilization.

New public and private investment should also be sensitive to HMI data: property owners (banks or local governments), when considering whether to sell or hold REO property; new commercial investors, when considering where to locate needed amenities; and home buyers, when considering where to purchase a home. To further improve the housing environment in areas with distressed housing markets, the report recommends that the City adopt new policies and ordinances that incentivize responsible rental ownership. Doing so would result in improved HMI scores and, likely, improve results of efforts to increase homeownership. Finally, allowing flexible zoning in large areas with significant housing deterioration should also encourage redevelopment investment.

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4 Currently, only CURA staff access the VHP spreadsheets and mapping files, and so far the government agencies and neighborhood organizations involved have been satisfied to receive maps, tables, and statistics from CURA upon request. As a result, there are no current plans to create a more interactive or publicly accessible version of the VHP data, but this matter may be reassessed as the users’ needs evolve.

5 At $6,746 per year, Minneapolis levies one of the nation’s largest fees on properties that sit vacant for extended periods of time.

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Related Research

One product of the Vacant House Project is the development of the North Minneapolis Housing Market Index, a data-driven analysis of housing market strength in Minneapolis’s north side. The VHP’s principal participants led the effort to develop this index, which is described in the report below.

Folwell Center for Urban Initiatives. North Minneapolis Housing Market Index. Minneapolis: FCUI, 2011. This report introduces the Folwell Center for Urban Initiatives’ Housing Market Index (HMI), a new tool that measures the strength of an area’s housing market. The HMI can help local leaders better plan and target sustainable housing interventions as part of their broader reinvestment effort. The HMI borrows from an index created by the Local Initiatives Support Corporation. The most significant difference is the HMI’s geographic specificity—neighborhoods are measured by block, not census tract or zip code. The HMI offers a block-by-block view that provides a more precise understanding of neighborhoods. When applied to a neighborhood, it clearly shows investment and disinvestment, as rates of owner-occupancy, housing condition, vacancy, and value retention are combined and compared.

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Figure 1. Composite of Residential Vacancy Indicators for North Minneapolis, July 2011

Source: Hennepin County; City of Minneapolis; Folwell Neighborhood Association; CURA. Data compiled by CURA as part of the 4th Police Precinct VHP.

Citywide Statistics

Vacancy Indicator

- Vacant or boarded: 483
- Windshield survey: 259
- Zero residential water usage: 1,559
- CPED pending demolition: 17
- Copper theft (2010–2011): 178

Legal Judgment

- Foreclosures: 1,021
- Tax forfeited: 339

Source: Hennepin County; City of Minneapolis; Folwell Neighborhood Association; CURA. Data compiled by CURA as part of the 4th Police Precinct VHP.
to those used by NEO CANDO, a leading neighborhood data aggregator based in Cleveland, the VHP also utilizes information on the location of copper-pipe theft, the City’s official VBR list, and the City’s list of houses slated for demolition. Using additional indicators not just to detect vacancy but also to determine the foreclosure risk and housing-market strength of each block could add even more richness to the database, though fees for the data and privacy issues still need to be considered. For instance, every four years city assessors rate the condition of every structure in Minneapolis, and the City is willing to provide this information to the VHP for free. Adding this information could help refine the remediation and stabilization measures taken for each structure. For example, if a vacant house that is assessed as being in poor physical condition is located on a block with a weak housing market and high foreclosure risk, the City may be more inclined to demolish the property rather than attempt to rehabilitate it. On the other hand, CURA is exploring the possibility of adding more utility information—such as zero electricity and gas usage, as well as garbage removal—to help determine the likelihood of vacancy, but the costs and the availability of these data sets are still unknown, as is the usefulness of the information.

6 The Northeast Ohio Community and Neighborhood Data for Organizing (NEO CANDO) is a free, publicly accessible social and economic data system. For more information, visit NEO CANDO’s website at neocando.case.edu/cando/index.jsp.
How Other Areas Can Replicate This Data-Sharing Model

The data from the VHP—and, more importantly, the network supplying the data—are likely to play central roles in many additional neighborhood-stabilization initiatives going forward (see sidebar on page 14 for an unusual but critical example of this). In fact, the coalition that formed around the VHP represents just a cross section of sources that CURA regularly calls on for information. As an active participant in civic and neighborhood affairs for more than four decades, CURA has developed productive relationships with municipal departments and other nonprofits across the Twin Cities. Although not all areas of the country have a prominent organization such as CURA to act as data and information facilitators, it takes only a proactive neighborhood organization, nonprofit, or even municipal agency to begin the process of establishing one.

Finding and Nurturing Data Sources

Of all of the data sets used in the VHP, the most difficult to obtain is current parcel data, which includes geographic, legal, and zoning information of land and the structures on it. Most municipalities nationwide are beginning to capture this data. Seven years after the event, other organizations that had previously established relationships with CURA requested information to help in understanding the extent of the damage and to aid in planning their future outreach activities.

7 Already the new database was used for an unexpected but vital purpose after a tornado struck North Minneapolis in May 2011. As described in the sidebar on p. 14, City and County officials, some of whom were involved in the VHP, turned to CURA and the database to help in organizing and targeting a rapid response to this disaster. Several weeks after the event, other organizations that had previously established relationships with CURA requested information to help in understanding the extent of the damage and to aid in planning their future outreach activities.

Table 1. Policy Strategies to Prevent Crime and Promote Reinhabitation in Minneapolis

<table>
<thead>
<tr>
<th>Preventing Property Damage</th>
<th>Reinhabiting and Selling Vacant Homes</th>
<th>Long-Term</th>
</tr>
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<tbody>
<tr>
<td><strong>Ongoing</strong></td>
<td><strong>Temporary</strong></td>
<td><strong>Long-Term</strong></td>
</tr>
<tr>
<td>Require water shut off as soon as home is vacant</td>
<td>Rent homes to individuals on Section 8 (if subsidies are available)</td>
<td>Target down-payment assistance to homes on “quick sales possible” list</td>
</tr>
<tr>
<td>Train and pay neighbors, via neighborhood organizations, a small stipend to maintain and watch homes (e.g., cut grass, pick up trash)</td>
<td>House families on nonprofit waiting lists (e.g., Urban Homeworks)</td>
<td>Determine which homes can be sold quickly; use network of North Minneapolis real estate agents and targeted subsidies to put homes back in service</td>
</tr>
<tr>
<td>Create local, private report system neighbors can use to report changes in vacant homes</td>
<td>Allow use of homes as transitional housing for families leaving shelters</td>
<td>Create incentive fund for North Minneapolis real estate agents working together to share potential buyers who are willing/able to purchase homes</td>
</tr>
<tr>
<td>Train local U.S. Postal Service workers to “check in” with reporting system above</td>
<td>Create list of college students willing to rent vacant homes</td>
<td>Reduce City regulatory barriers to home improvement (e.g., lead abatement, number of residents per home)</td>
</tr>
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Figure 3. Parcel-Level View of Residential Vacancy Indicators for Folwell Neighborhood in North Minneapolis, July 2011

- Vacant or boarded
- Copper theft (2010–2011)
- Windshield survey
- Foreclosed
- Zero residential water usage
- 2011 properties pending forfeiture*
- CPED pending demolition
- *2011 Notices of Expiration of Redemption

Source: Hennepin County; City of Minneapolis; Folwell Neighborhood Association; CURA.
Sharing Data to Aid a Tornado-Recovery Effort

A tornado with winds topping 110 miles per hour ripped through North Minneapolis on May 22, 2011, leaving a scar nearly four miles long and damaging nearly 1,900 properties. The damage assessments, which were conducted by the Federal Emergency Management Agency (FEMA), found that 274 properties sustained major damage (i.e., homes had structural or significant damages, were uninhabitable, and required extensive repairs) and that 1,608 properties sustained minor damage (i.e., homes were damaged and uninhabitable, but may be made habitable in a short period of time). Because of the large loss of viable housing, hundreds of people were left without homes. This situation heightened the urgency to act.

Partly due to cross-organizational relationships developed in the VHP, officials from the City of Minneapolis and various nonprofit groups quickly turned to CURA for help in understanding the extent and location of the tornado damage. Using data gathered from the VHP and other projects, CURA promptly provided maps that indicated—at the parcel level—FEMA’s assessment of structural damage, official ownership status (legal rental property or owner-occupied home), and specific repair needs. CURA also provided maps that indicated which of the damaged properties had emergency contact information available. These maps aided the City in prioritizing its outreach efforts and helped nonprofit groups plan their recovery services.

Using Data Transparently to Build Trust

To gain regular access to public information without resistance or pushback from those agencies that hold the data, requesting agencies must be up front about their intentions. Importantly, CURA’s role as the go-to place for neighborhood-level data and analysis did not happen overnight; rather, CURA achieved this distinction by continually demonstrating the wide application of data, by maintaining political support for its programs, and by disseminating its research findings to as broad an audience as possible. A key component of this formula is the strong connection of trust that must be built over time, whereby the organization requesting the information must demonstrate that administrative data has a value beyond the simple requirements for which it is collected. That was the case with the water-usage utility data obtained from the City for the VHP: Data collected primarily for administrative purposes (i.e., billing residents for water usage) provided valuable secondary benefits as well. These data have not only helped identify vacant houses, but have also revealed that a significant portion of water meters are likely malfunctioning—valuable information for City officials. By demonstrating data’s usefulness, CURA has established a network of partners that willingly shares data in a reciprocal system that benefits all parties involved.8

Collaborating with Like-Minded Groups

Finally, connecting with other like-minded organizations will greatly expand opportunities and highlight and improve data-acquisition and data-analysis strategies. One particularly powerful resource is the National Neighborhood Indicators Partnership (NNIP), “a collaborative effort by the Urban Institute and local partners to further the development and use of neighborhood-level information systems in local policymaking and community building.”9 Since joining NNIP, CURA staff have connected with and learned from the more than 40 CURA-like centers across the country. These connections have resulted in an increased awareness not only of potential data sources, but also of the multiple uses that different data sets can have—educational insights that await anyone who reaches out to other organizations with similar or complementary interests.

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8 Another data-sharing success story occurred a decade earlier when CURA had developed a database and information-sharing structure that assisted Minneapolis neighborhood organizations in detecting properties that were susceptible to abandonment by owners. This early-warning system required the collaboration and cooperation of numerous City agencies and neighborhood groups, and it ultimately proved useful to the City itself, because the neighborhood residents who had access to the information not only provided feedback on data inaccuracies but relied less on City personnel for information requests. Although the work to create this database of early-warning indicators occurred more than 10 years ago, the City continues to use it in a modified form.

9 See the NNIP website at www2.urban.org/nnip/.